

matter, it is respectfully submitted that the rejected claims are also allowable for the reasons set forth below.

Claims 1-3, 11 and 12 stand rejected as being anticipated by U.S. Pat. No. 5,185,111 to Lazar. According to the Office action, Lazar discloses microporous, open celled foams as claimed in the present application. Applicants respectfully traverse this rejection for the following reasons. The applicants submit that this rejection fails as a matter of law because the cited reference fails to disclose each and every element of the invention as claimed. Claim 1, upon which the other claims depend, specifically recites an open cell foam having an open cell content of 80% or more, an average pore size of about 1-200 microns and a phase change material present the open cell foam in the amount of 80% volume or greater. The disclosure in Lazar is insufficient to anticipate or render obvious the claims of the present application. Lazar discloses methods of making microporous elastomeric structures having interconnected networks of cavities, but fails to disclose or suggest an open cell foam having an open cell content of 80% or more, an average pore size of about 1-200 microns or a phase change material present in the open cell foam in the amount of 80% volume or greater.

Lazar's disclosure relating to the use of water soluble salts including sodium chloride as void formers is insufficient to show that the microporous structure contains a phase change material. The present application discloses that water/sodium chloride is one of the phase change materials that is useful in the present invention. However, only certain sodium chloride solutions are typically considered to be phase change materials. Eutectic mixtures of sodium chloride and water comprising about 73% water and 27% sodium chloride are particularly useful as phase change materials. Although other mixtures of sodium chloride and water may also be used as phase change materials, the effectiveness of the mixtures as phase change materials is less than that of the eutectic mixture. Lazar fails to disclose or suggest any sodium chloride solutions having a composition that could be considered to be a phase change material.

The Office's contention that Lazar's foams read on the claims of the present application at the time of leaching and at the time of being filled is purely conjecture and insufficient to anticipate the present claims. Since Lazar fails to explicitly disclose the incorporation of a phase change material in a foam, the Office must be taking the position that a phase change material is inherently formed when the foam in Lazar is leached or filled. "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999). In the present case, one of ordinary skill would not recognize that the solid sodium chloride distributed throughout the polymeric material as a void former would necessarily form a phase change material during leaching or filling of the foam. Furthermore, it is certainly not anything more than a mere probability or possibility that the concentration of sodium chloride would be sufficient such that one of skill in the art would consider the mixture to be a phase change material.

Likewise, Lazar fails to explicitly disclose an open cell foam having an open cell content of 80% or more. The disclosure in Lazar of a foam-forming composition containing a void former in an amount of 33-80% by weight is insufficient to satisfy this claim limitation. Although Lazar discloses a polymeric composition containing up to **80% by weight** of void former, it provides no indication as to the **open cell content by volume** of the finished foam. The low density foams produced using sodium chloride as a void former as disclosed in Lazar would have to an open cell content of about 90% by weight to approach the 80% open cell content by volume claimed in the present application. Sodium chloride has a density of around 2.2. It would be extremely difficult, if not impossible, to obtain an open cell content of 80% by volume or greater using sodium chloride as a void former since it has a density of approximately twice that of the polymeric foam forming material, typically around a density of 1.0. Again, the

mere probability or possibility that the resulting foam would have an open cell content of 80% volume or more is not sufficient to show that this claim limitation is disclosed in Lazar.

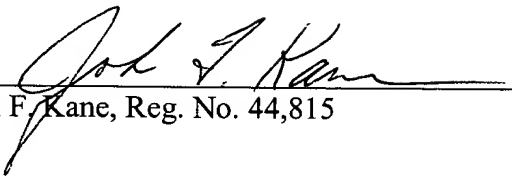
The same reasoning applies to the limitation in claim 1 of the present application regarding an average pore size of about 1-200 microns. The disclosure in Lazar of using void formers having a size distribution of from 0.5-500 microns is again insufficient to show that the finished foam would have an average pore size of about 1-200 microns as set forth in claim 1. There is absolutely no disclosure or suggestion in Lazar that the particle size of the void former translates to an equivalent average pore size. In fact, one of skill in the art would expect the sodium chloride crystals to provide a wide range of pore sizes significantly larger than the size of the individual crystals due to the expected aggregation of salt crystals during the process. The disclosure in Lazar is simply insufficient to show that the limitations of claim 1 necessarily flow from the disclosed method of forming a microporous elastomeric material. Therefore, applicants respectfully request that the rejection under 102(b) over Lazar be withdrawn.

Claims 16 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lazar further in view of U.S. Pat. No. 5,950,450 to Meyer et al. Again, applicants respectfully ~~traverse the rejection under §103(a) because the references even when combined fail to disclose~~ all of the limitations of the invention as claimed. Meyer et al. fail to remedy the deficiencies in the Lazar reference. Accordingly, applicants respectfully request that the rejection be withdrawn.

For the foregoing reasons, the applicants respectfully request that the rejections of record be withdrawn and that claims 1-20 currently pending are in condition for allowance. If the examiner would like to discuss any aspect of this response, please contact the undersigned at the telephone number indicated below.

U.S. Serial No. 09/783,876
Attorney Docket No. 629526-004
Response and Request for Reconsideration
Page 5 of 5

Respectfully submitted,



John F. Kane, Reg. No. 44,815

THOMPSON HINE LLP
2000 Courthouse Plaza, N.E.
10 West Second Street
Dayton, Ohio 45402-1758
Phone: 937-443-6816

308805